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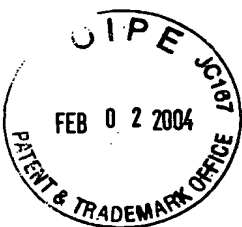


FIG. 1A

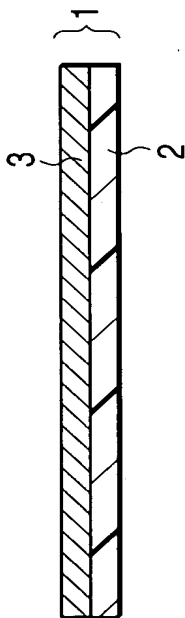


FIG. 1B

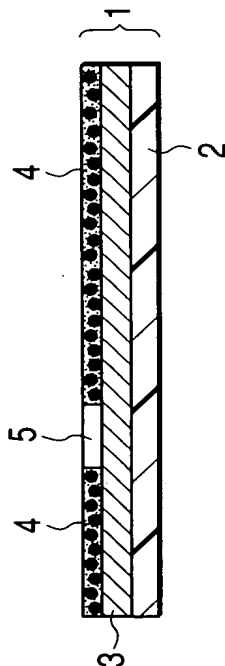


FIG. 1C

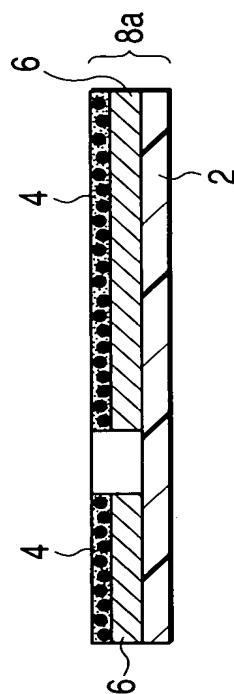


FIG. 1D

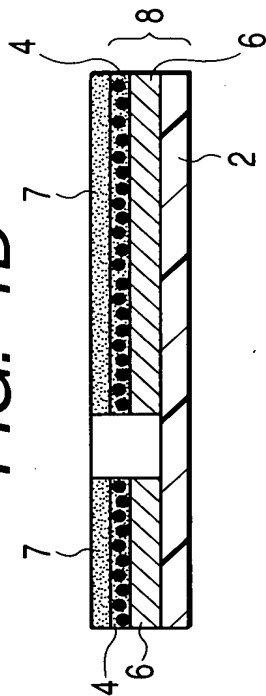


FIG. 1E

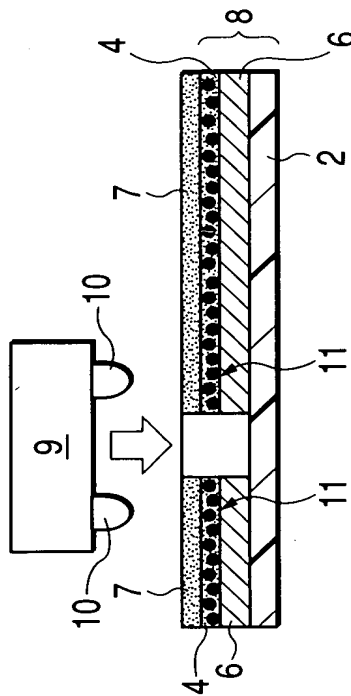


FIG. 1F

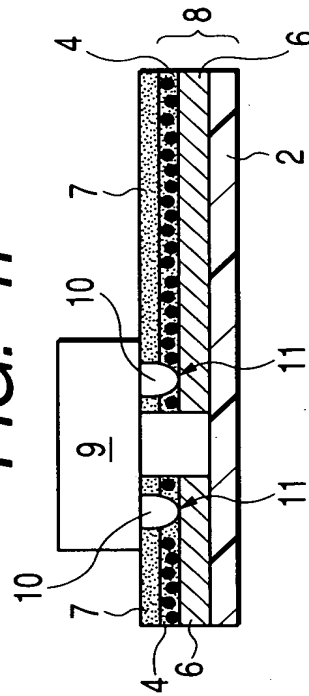


FIG. 2A

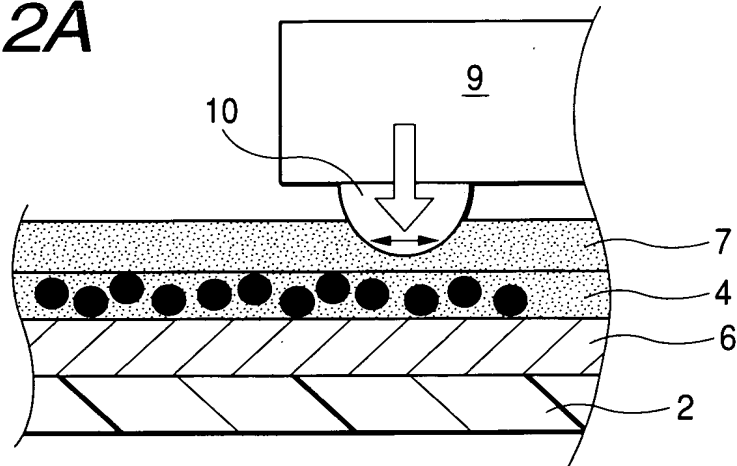


FIG. 2B

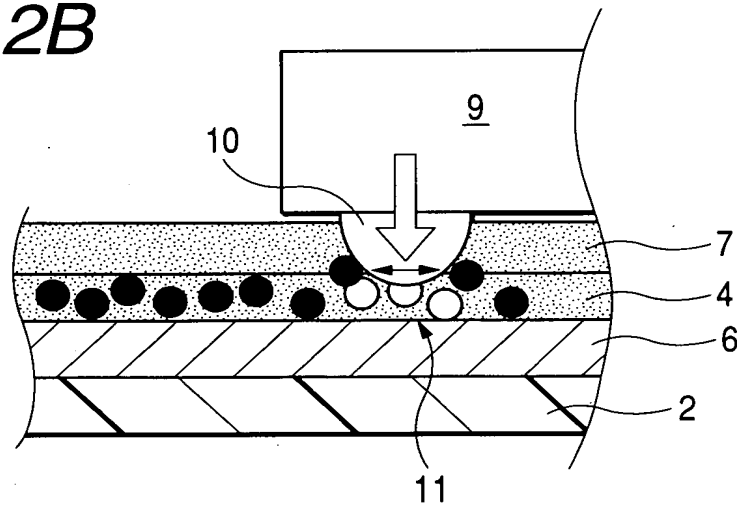


FIG. 2C

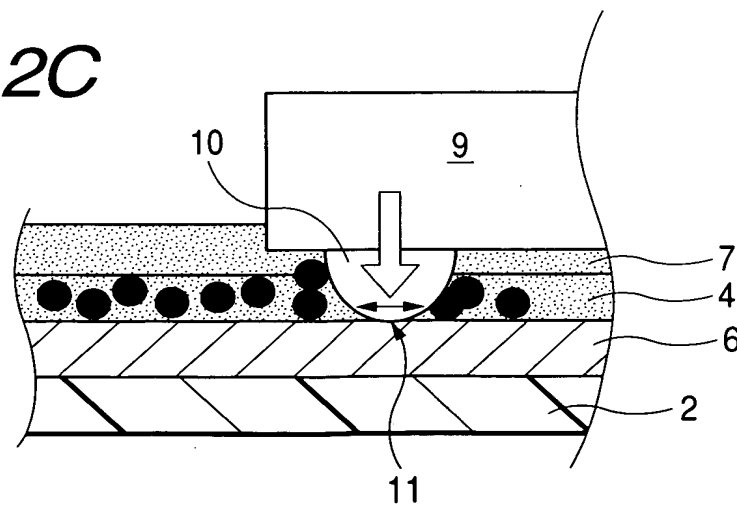


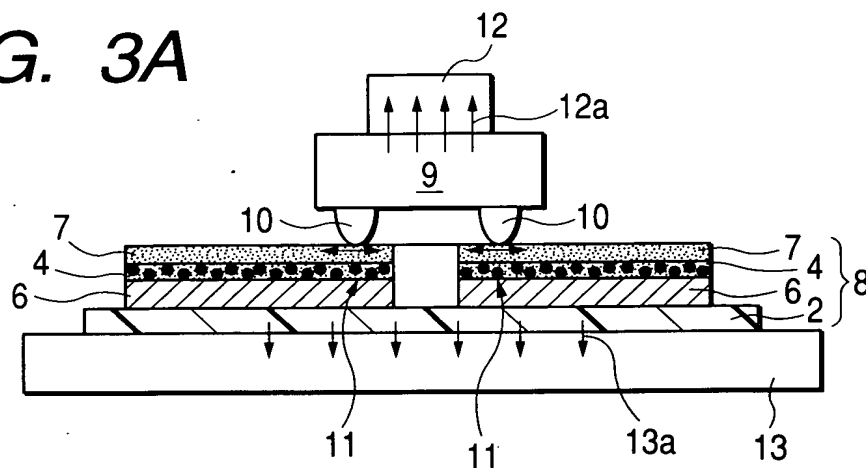
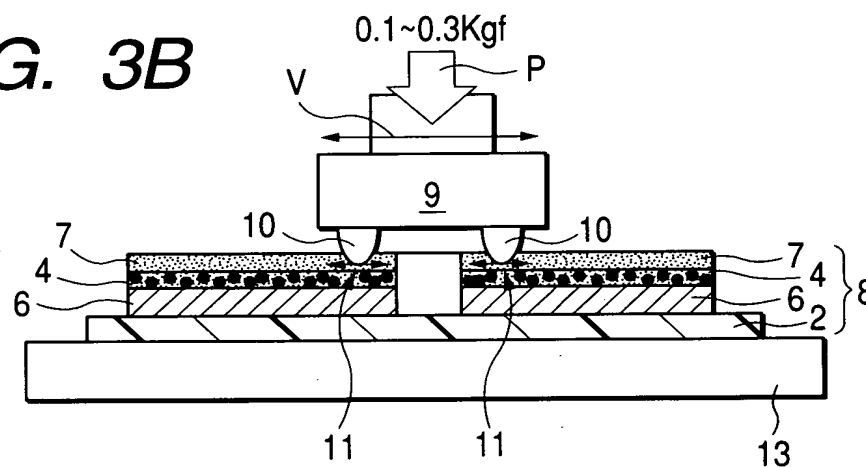
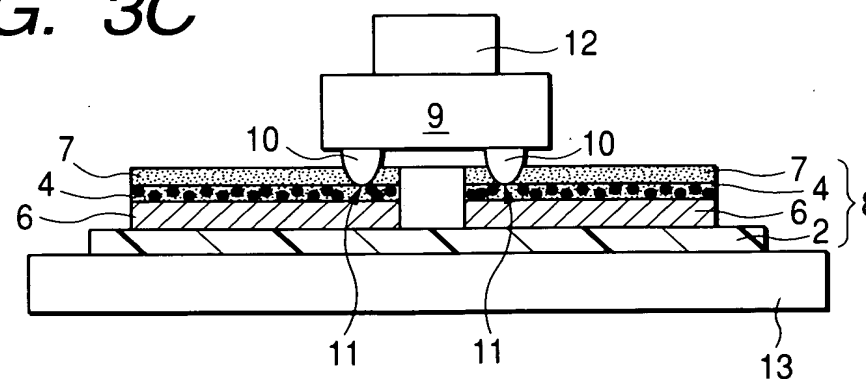
FIG. 3A**FIG. 3B****FIG. 3C**

FIG. 4A

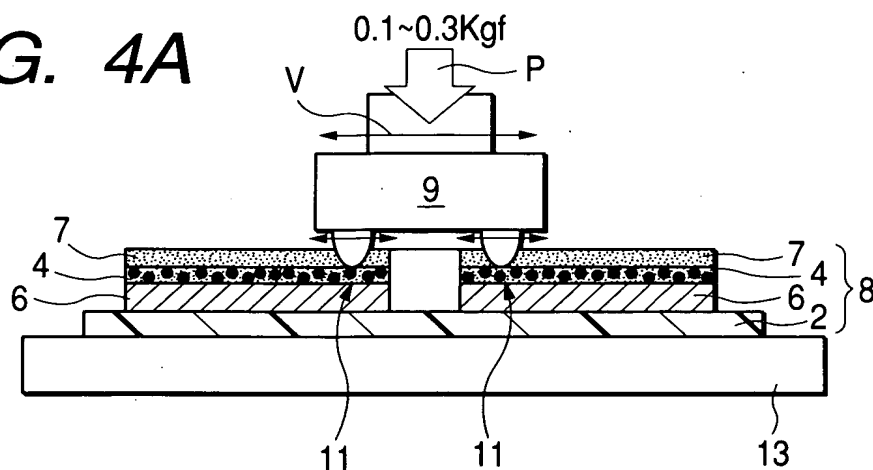


FIG. 4B

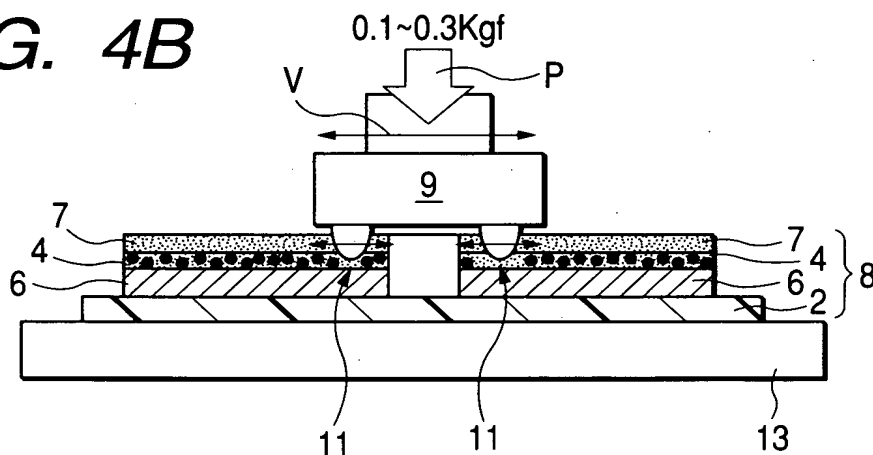


FIG. 4C

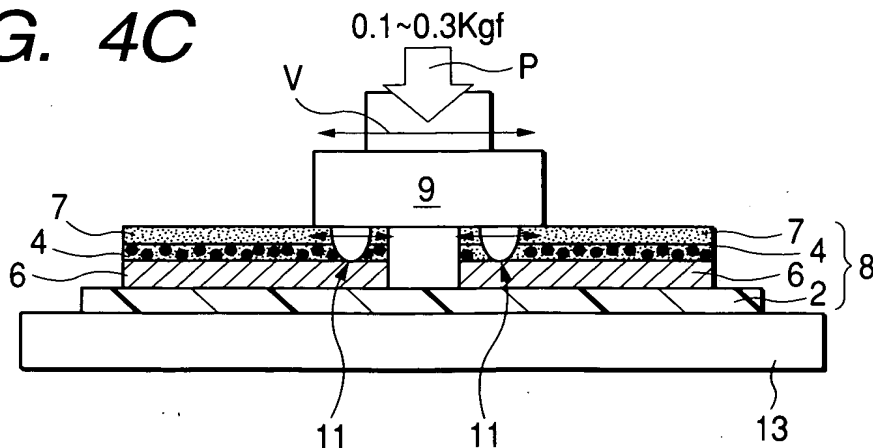


FIG. 5

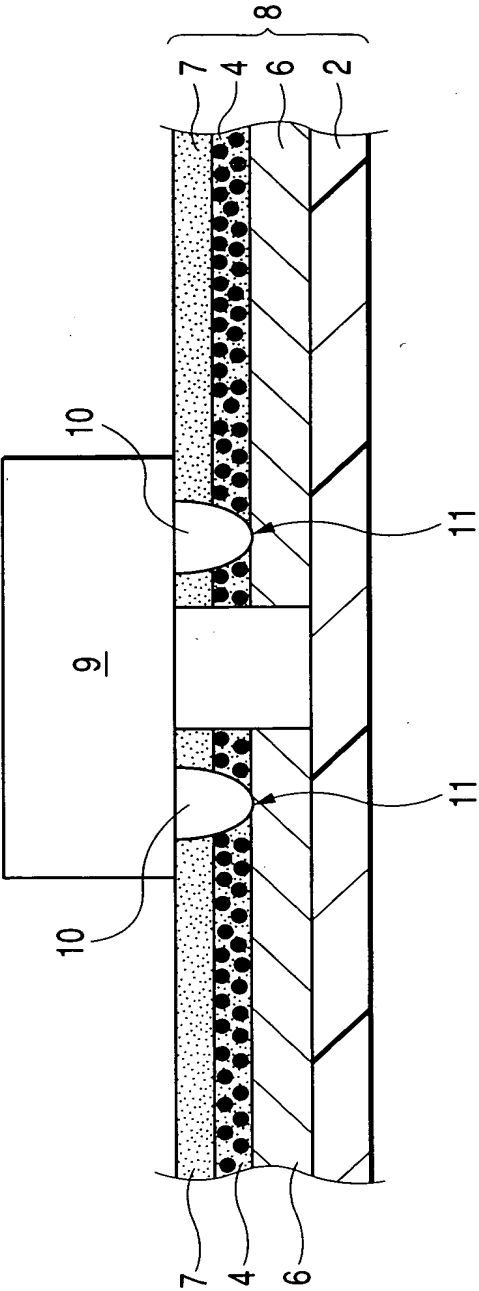


FIG. 6A

SEMICONDUCTOR MOUNTING METHOD	ULTRASONIC BONDING	EMBODIMENT
BONDING STRENGTH	200 ~ 250	1400 ~ 1700

FIG. 6B

SEMICONDUCTOR MOUNTING METHOD	THIRD METHOD OF THE RELATED ART	EMBODIMENT
SHORT-CIRCUIT FAILURE OCCURRENCE RATIO	5.0%	0.0%

FIG. 7A

SiO ₂ PARTICLES	NONE	PRESENT (EMBODIMENT)
SEMICONDUCTOR CHIP BONDING FAILURE (100 TESTS)	96.0%	0.0%

FIG. 7B

SiO ₂ PARTICLES	1 ~ 2 μ m	3 ~ 4 μ m (EMBODIMENT)
SEMICONDUCTOR CHIP BONDING FAILURE (100 TESTS)	50.0%	0.0%

FIG. 8

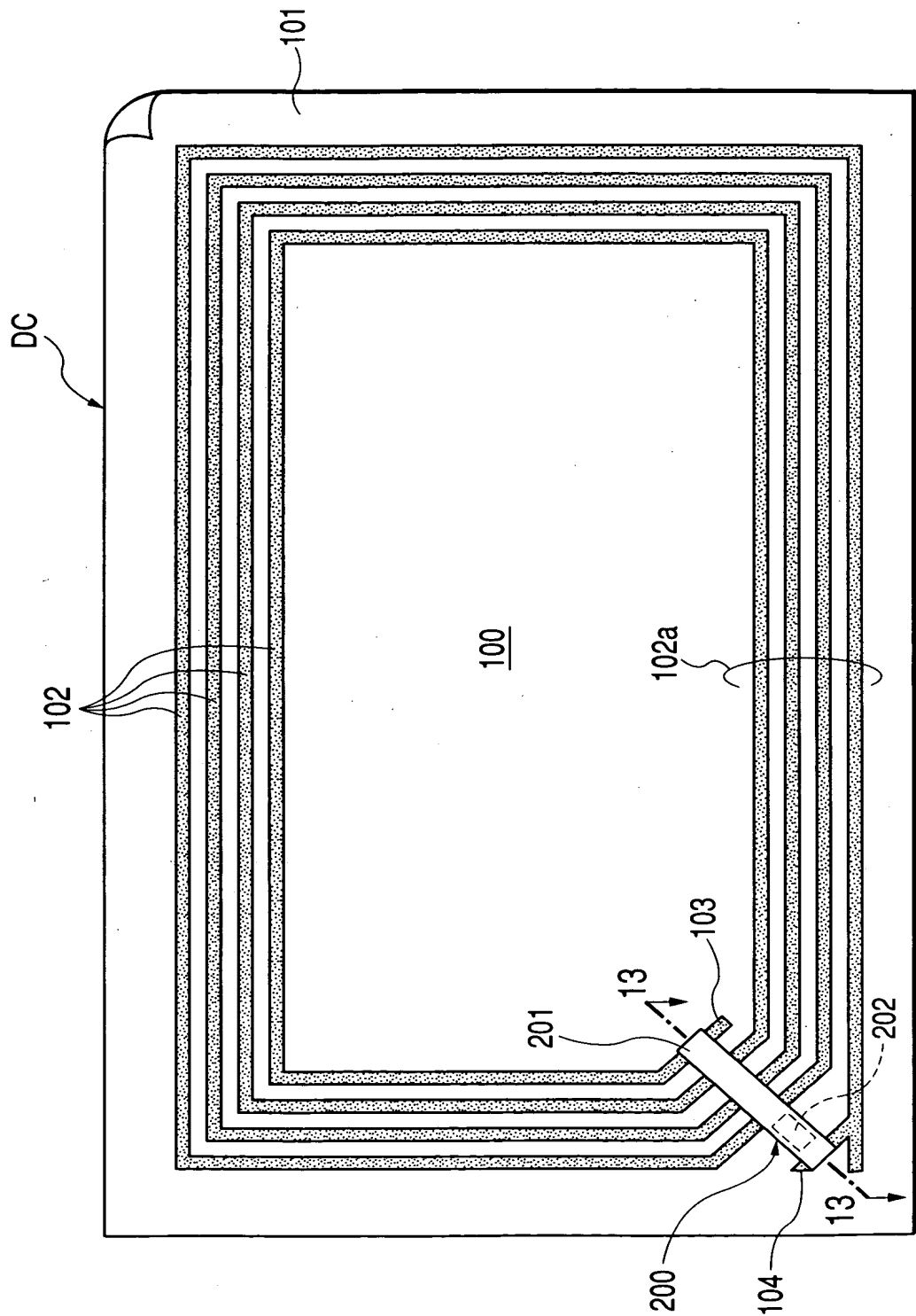


FIG. 9

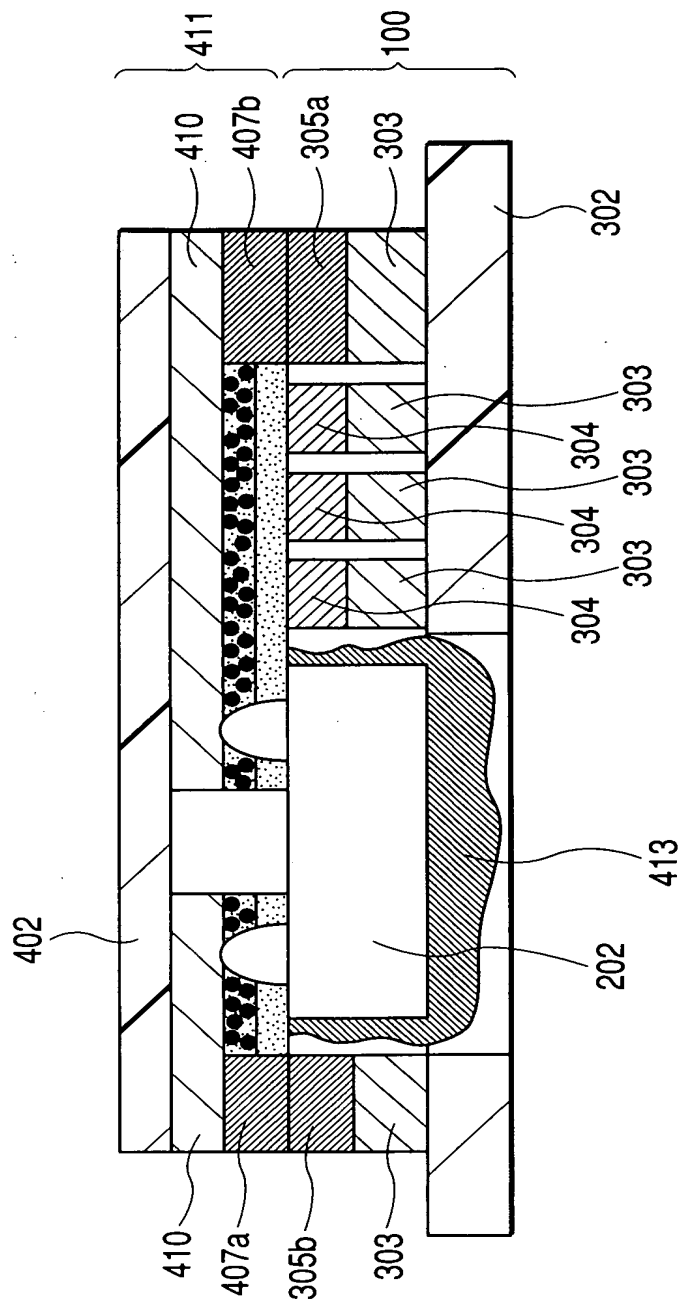
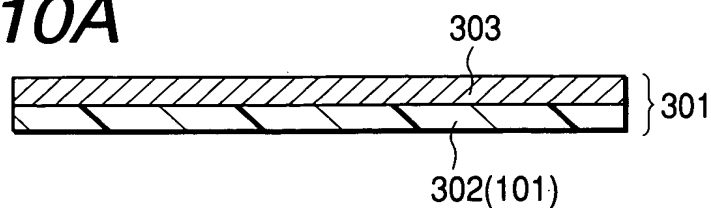
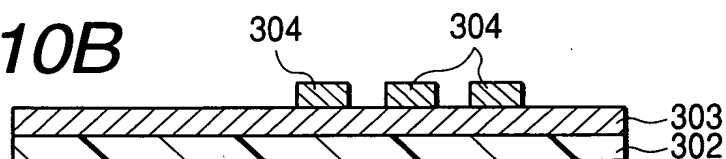
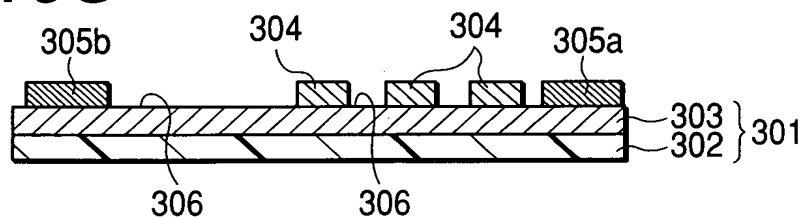
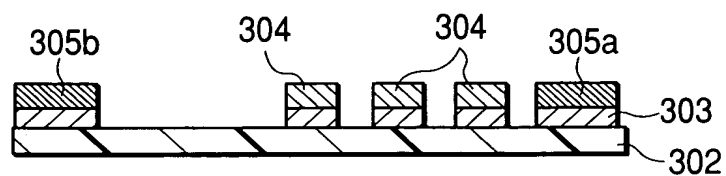
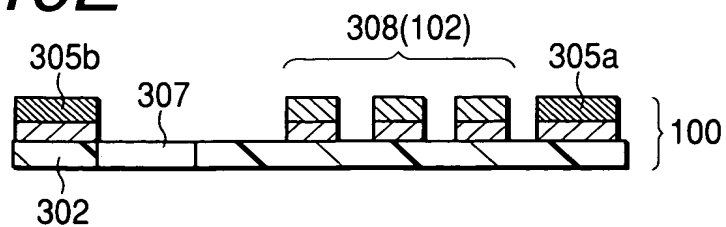


FIG. 10A**FIG. 10B****FIG. 10C****FIG. 10D****FIG. 10E**

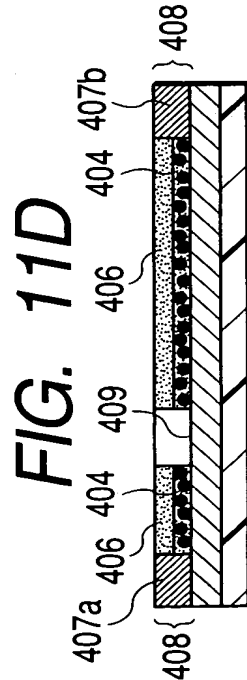
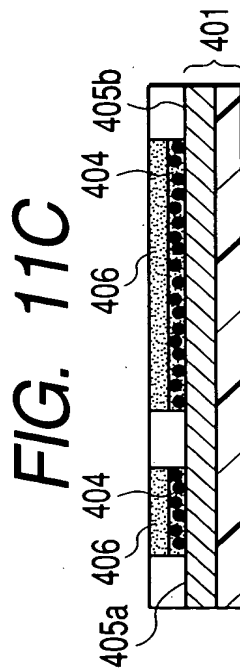
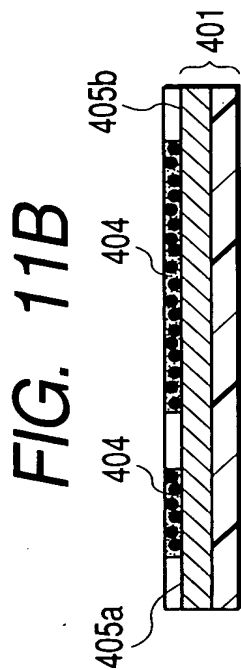
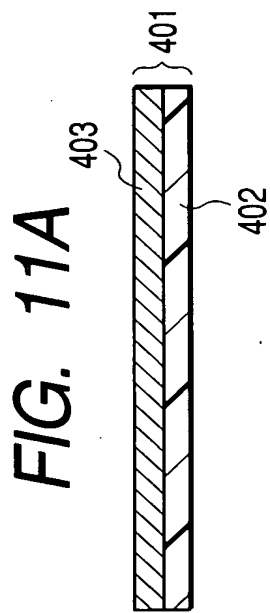
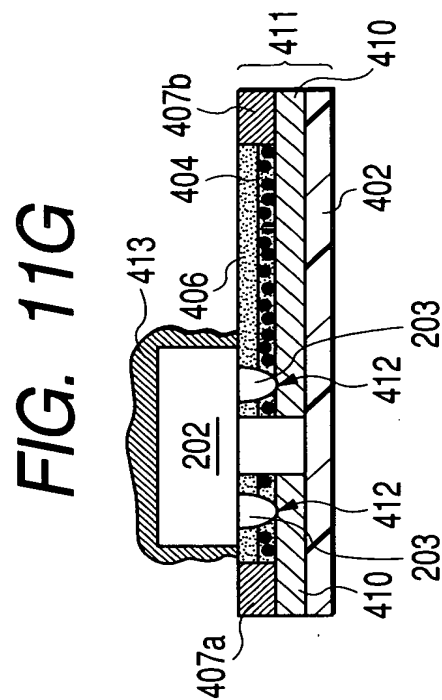
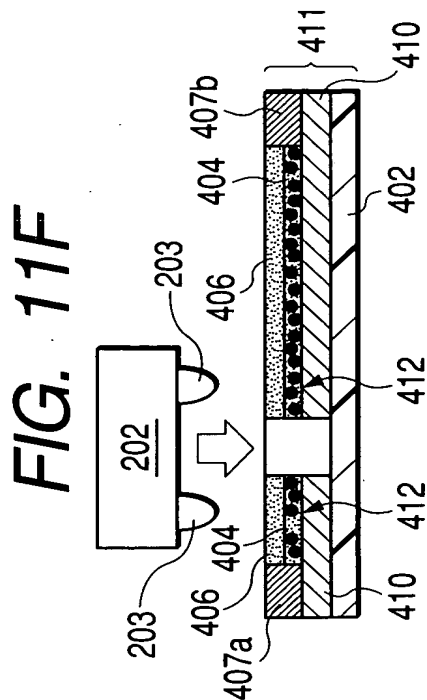
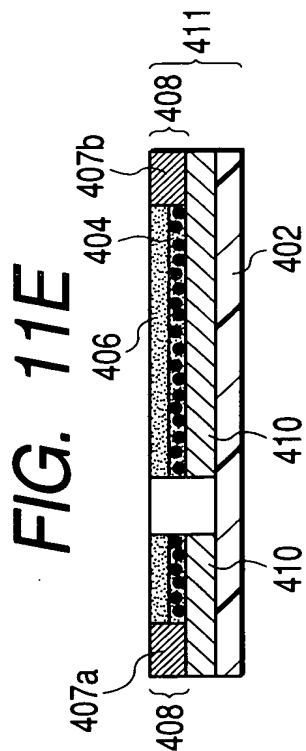


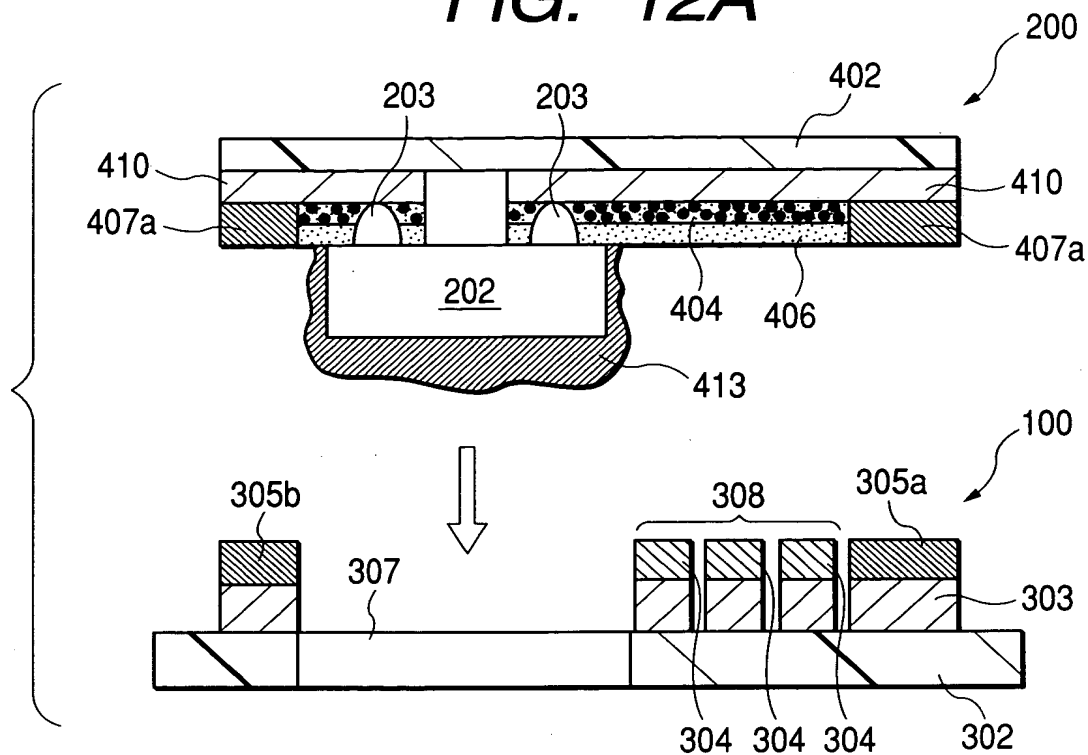
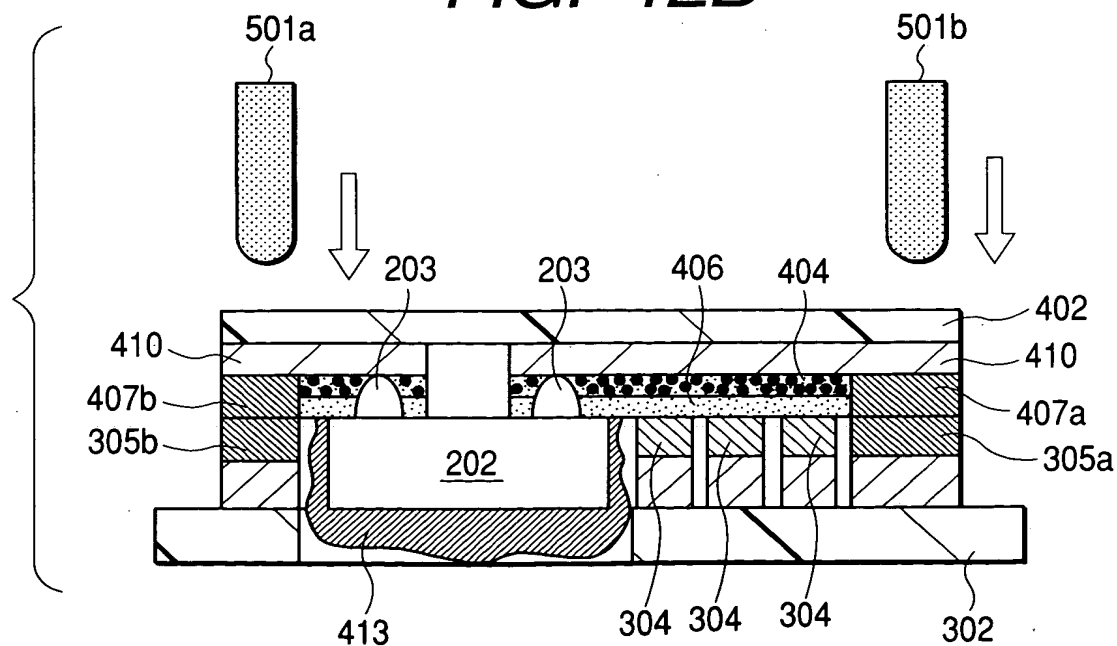
FIG. 12A**FIG. 12B**

FIG. 13

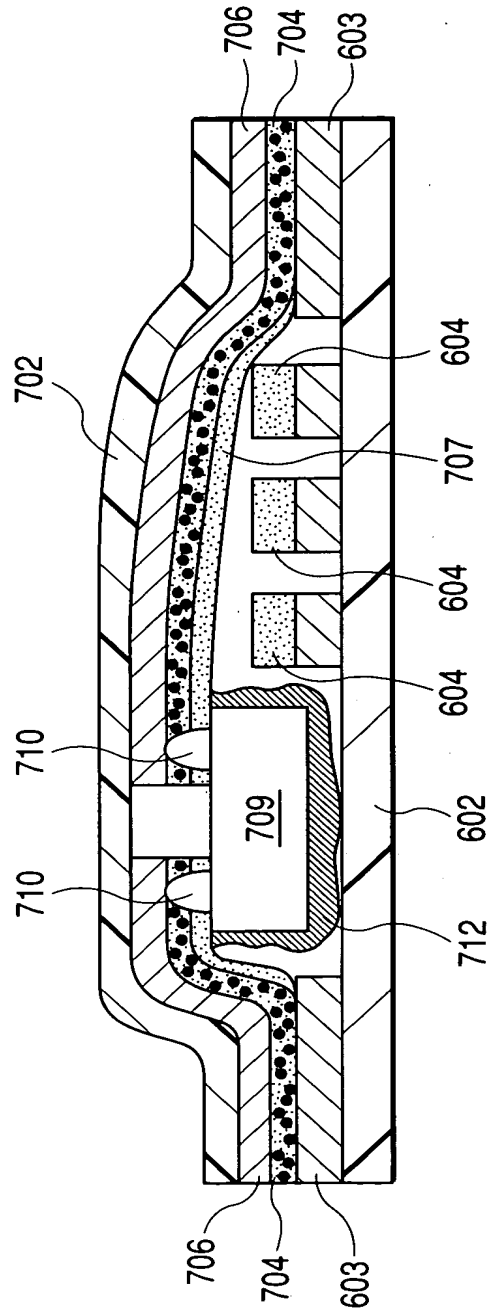
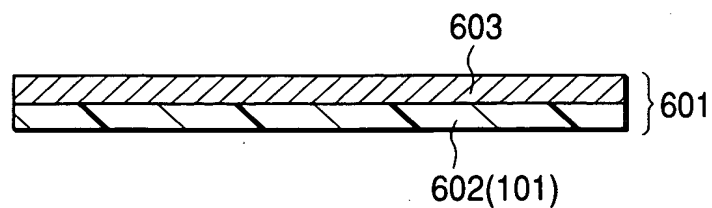
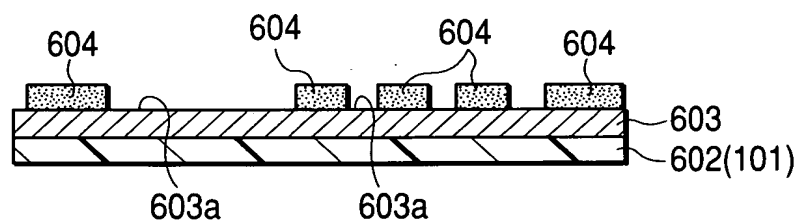
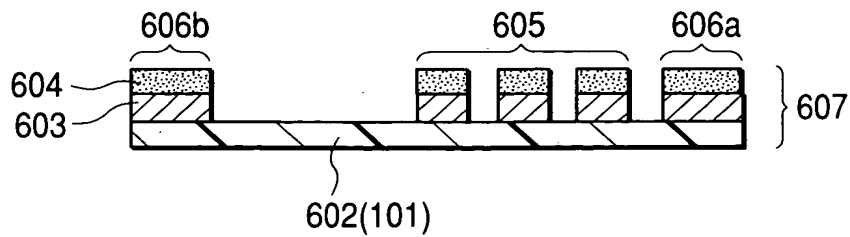


FIG. 14A**FIG. 14B****FIG. 14C**

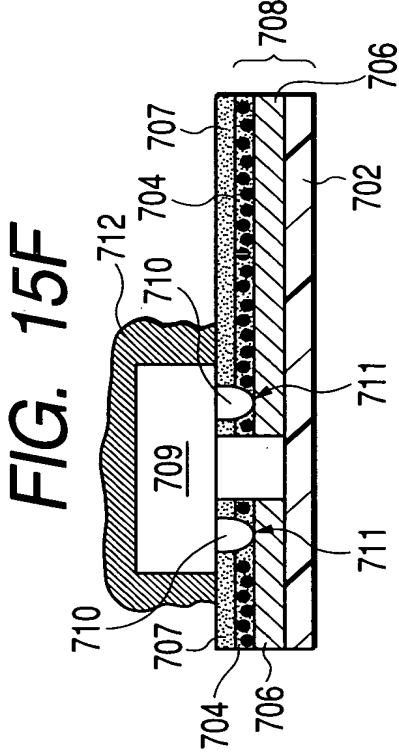
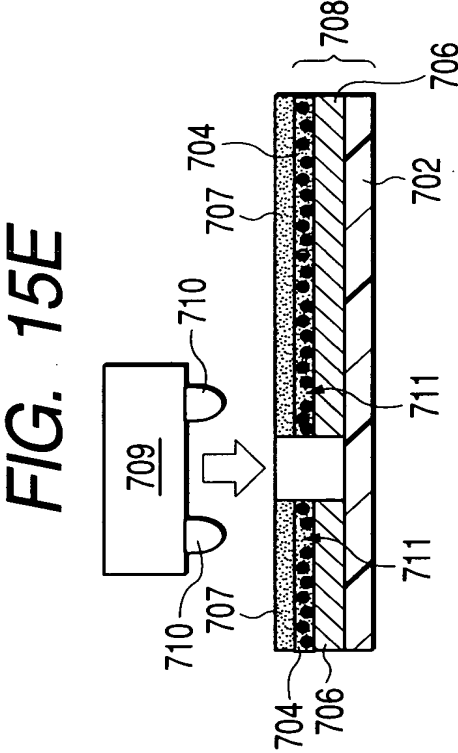
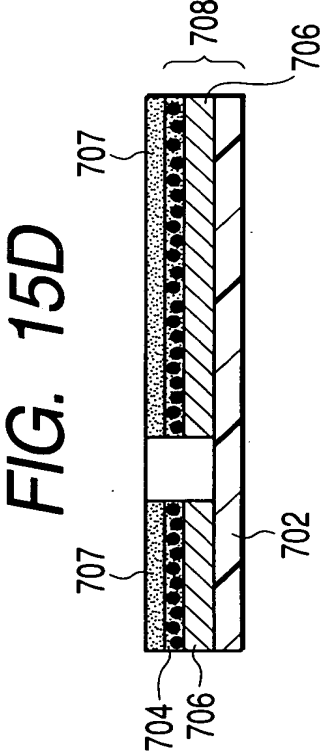
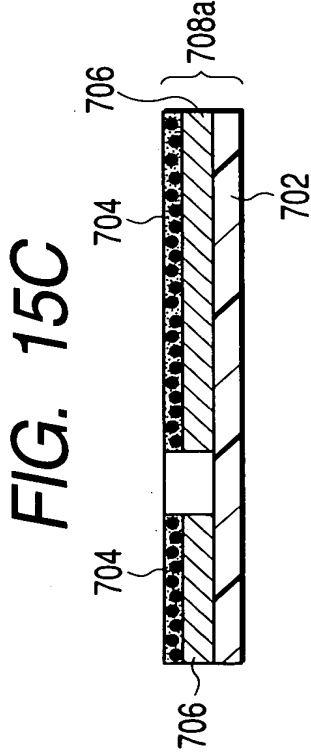
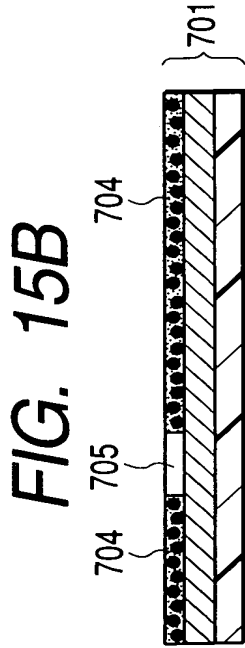
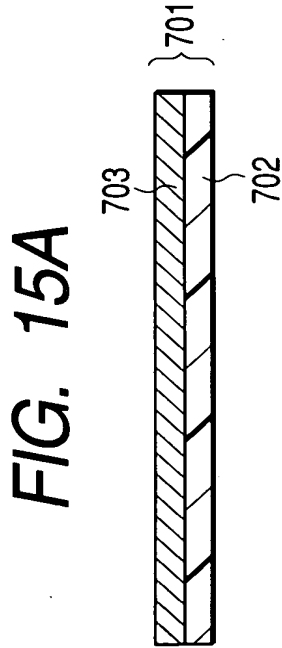


FIG. 16A

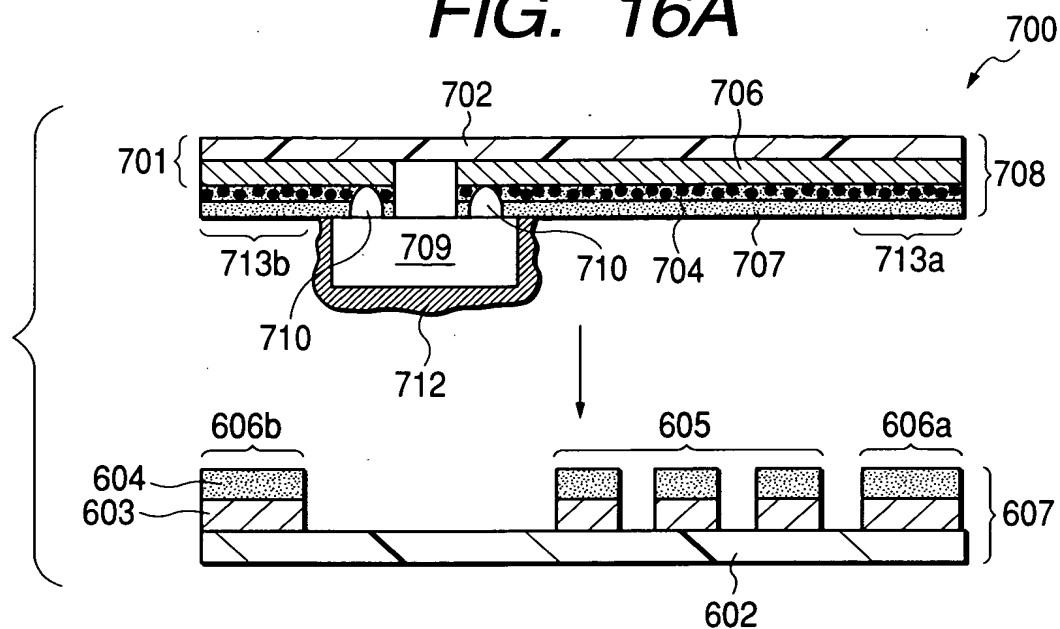


FIG. 16B

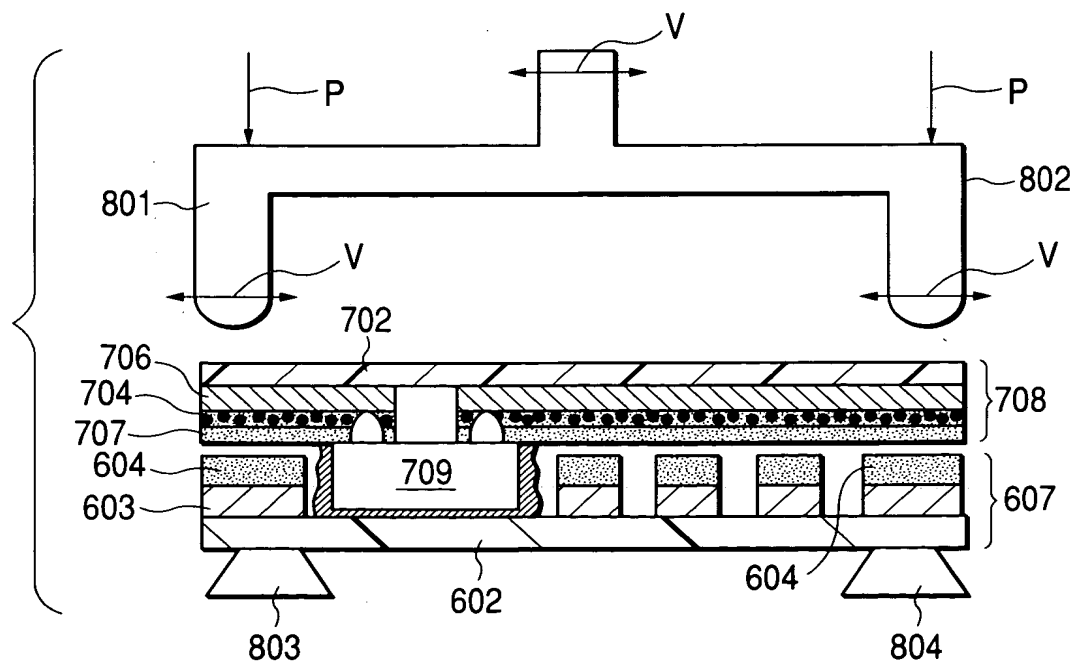


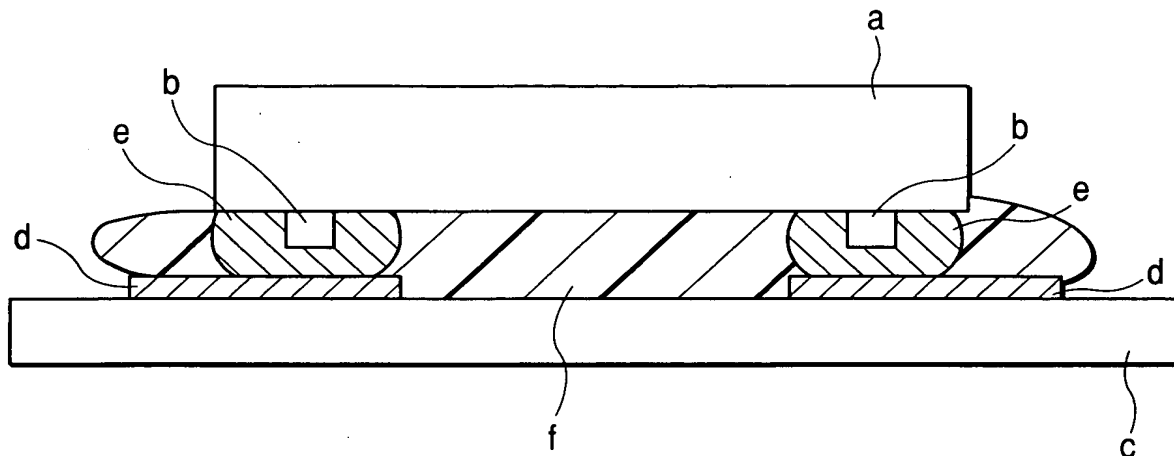
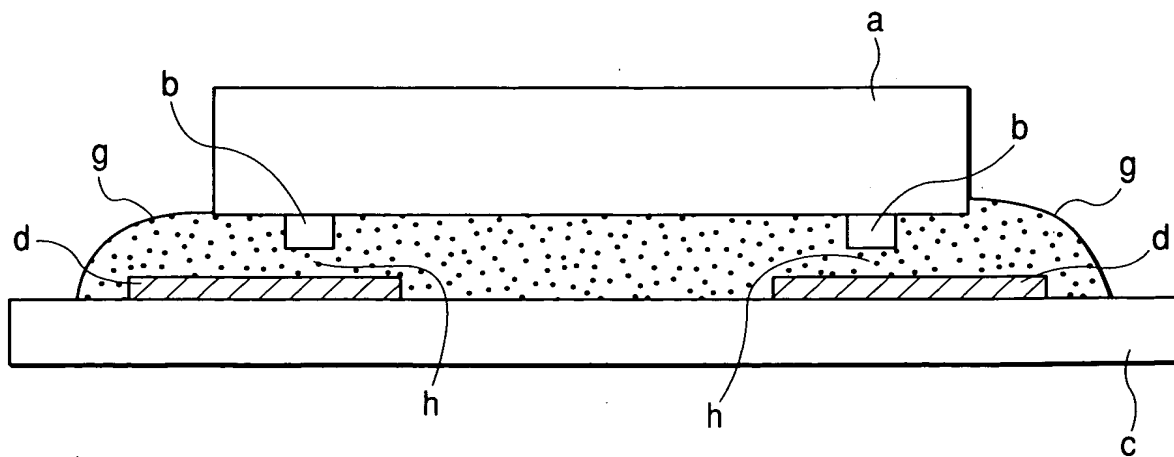
FIG. 17*FIG. 18*

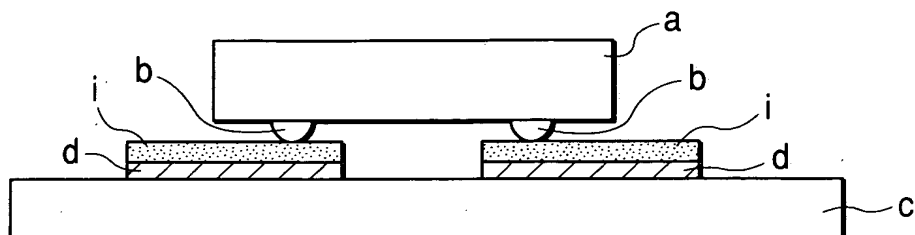
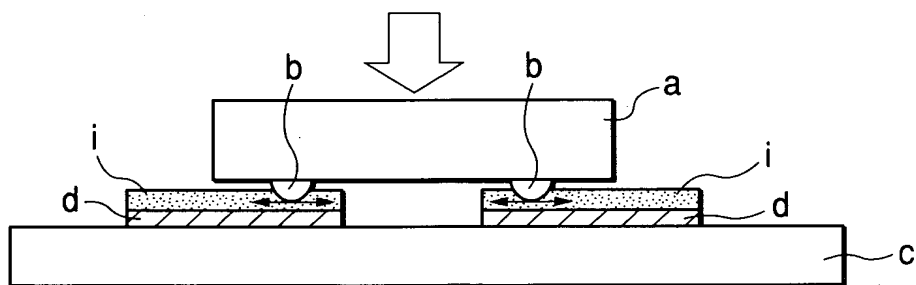
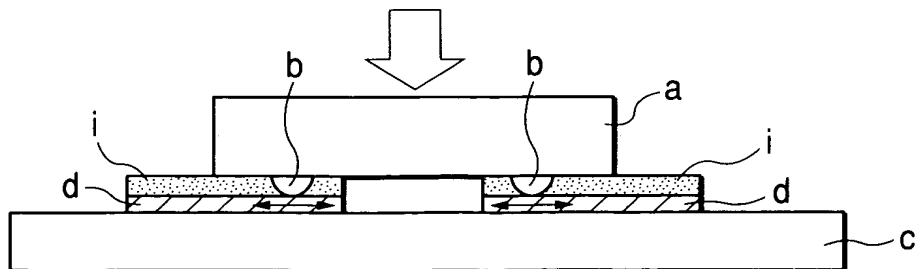
FIG. 19A**FIG. 19B****FIG. 19C**

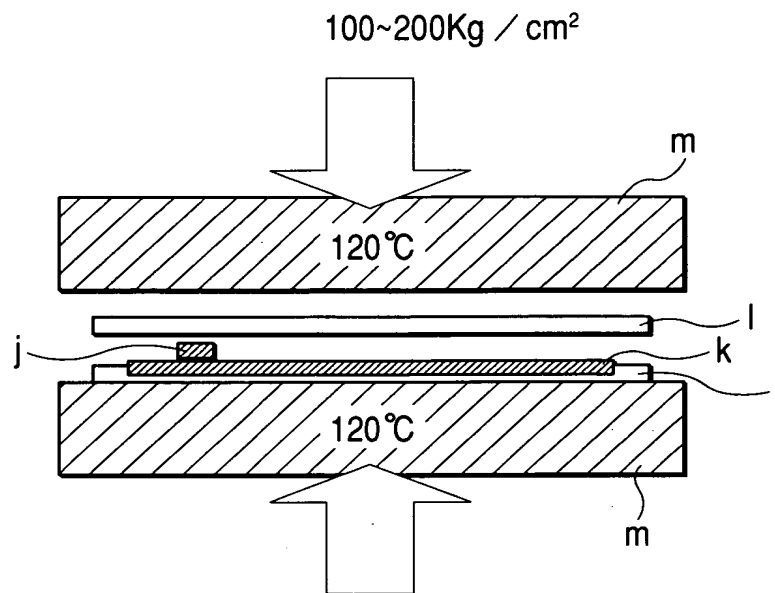
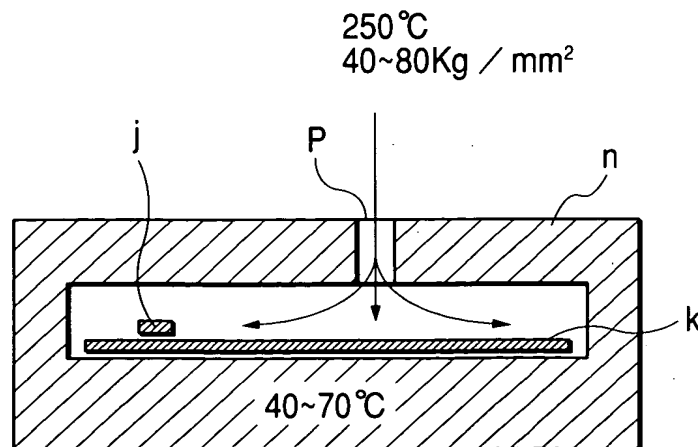
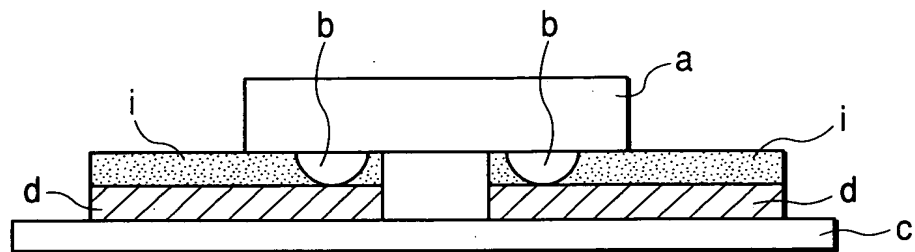
FIG. 20A**FIG. 20B**

FIG. 21A**FIG. 21B**